

Japanese Biodiversity Observation Network (J-BON)

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J-BONについて

総会・ワークショップ

設立趣意書

課題と推進体制

<http://www.jbon.org/eng>

Established in 2009

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ABOUT J-BON

J-BON is a network of researchers, NGOs and policymakers which coordinates various research activities, observation networks, and databases on ecosystems and biodiversity in order to enhance biodiversity observation activities in Japan. J-BON collaborates with AP-BON and GEO BON to contribute to the global biodiversity observation activities.

CALENDER

2021年1月

月	火	水	木	金	土	日
			1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

投稿

- **【開催案内】** ブルーカーボン国際 Workshop (11/30, 横浜国立大学)
- **【開催案内】** GBIFワークショップ「日本と世界の生物多様性情報学の現状と展望」(12/13)
- **【開催案内】** 生物多様性条約第12回締約国会議報告会 (12/3, 日比谷)

Organization of J-BON

J-BON

Japanese Biodiversity Observation Network

Working Groups



GEO BON

AP-BON

Collaboration

JaLTER

JBIF

Collaboration

JAXA

JAMSTEC

NIES

Interface

Ad-hoc WG
etc.

Assessment
& Projection

Agricultural
land,
Grasslands,
Satoyama

Organizing
committee

Chair
Co-chair
Deputy manager
Secretary

Remote
sensing

Inlandwater
ecosystem

Species and
Genetic
diversity

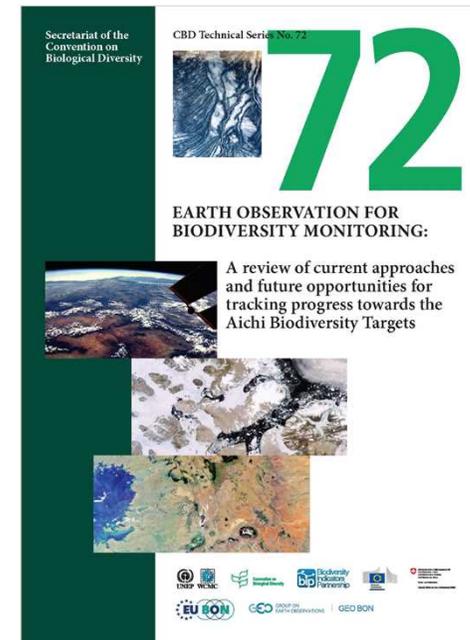
Forest
ecosystem

Marine
ecosystem

Example of related achievements (2014)

Contribution to CBD (CBD Technical Series 72)

- Information on satellite data and the applications for biodiversity observation
- Overview of JBON activities that involve efforts to link remote sensing data and in-situ ecological data in both terrestrial and aquatic ecosystems



Section 3.5 THE JAPANESE BIODIVERSITY OBSERVATION NETWORK (J-BON) WORKING GROUP ON THE INTEGRATION OF REMOTELY SENSED AND IN-SITU OBSERVATIONS

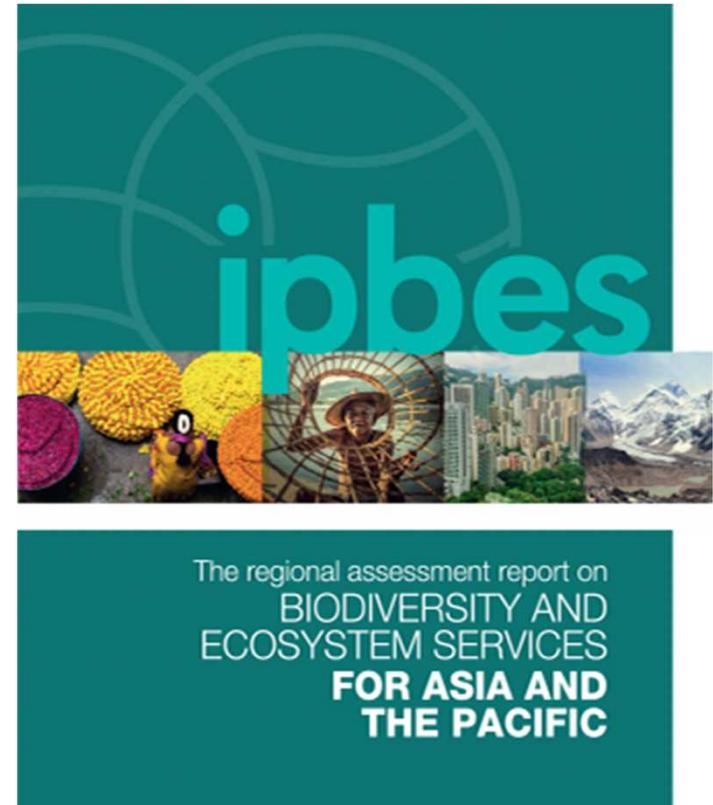
Example of related achievements (2018)

Contribution to IPBES Asia-Pacific Regional Assessment Report

Box 5.4 CASE STUDY: Future of corals around Japan under climate emission scenarios. From Yara *et al.* (2012).

CO₂ emissions causes ocean acidification, and along with global warming, it is an imminent issue for future status of calcifying organisms such as corals, because dissolved CO₂ reduces the saturation state of the carbonate mineral aragonite (Ω_{arag}) in seawater (Hoegh-Guldberg *et al.*, 2007). Future coral habitats in the seas around Japan during this century were estimated based both on global warming and on ocean acidification, by using the results from the coupled global carbon cycle–climate model under the Intergovernmental Panel on Climate Change (IPCC) emission scenarios SRES A2 and B1 (Yara *et al.*, 2012, 2016). Under the business-as-usual emission scenario (SRES A2), coral habitats will be sandwiched and narrowed between the northern region, where Ω_{arag} decreases, and the southern region, where coral bleaching occurs. This

resulted in disappearance of corals around Japan in the 2070s. Under the low-emission scenario SRES B1, however, the coral habitats will also shrink in the northern region due to the reduced Ω_{arag} , but to a lesser extent than under SRES A2, and in contrast to SRES A2, no bleaching will occur in the southern region. Therefore, coral habitats in the southern region are expected to be largely unaffected by ocean acidification or sea surface temperature warming under the low-emission scenario. Potential future coral habitats depend strongly on CO₂ emissions, and emphasize the importance of reducing CO₂ emissions to prevent negative impacts on coral habitats, which was also suggested for the world's corals and achieving the Paris Agreement is required (Magnan *et al.*, 2016).



Chapter 5.2 OBSERVED AND PROJECTED IMPACTS ON BIODIVERSITY
AND ECOSYSTEM SERVICES IN THE ASIA-PACIFIC REGION



Example of related achievements (2020)

Contribution to Open Science

Special issue in *Ecological Research*:
Data rescue

24 papers in total



 Full Access

Volume 35, Issue 6

Special Issue: Data rescue
—collection of precious and
laborious in situ observed data

Pages: 927-1121

November 2020



 Full Access

Volume 35, Issue 5

Data rescue—collection of precious
and laborious in situ observed data

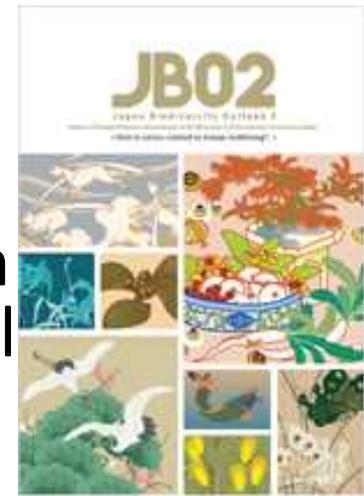
Pages: 683-926

September 2020

<https://esj-journals.onlinelibrary.wiley.com/journal/14401703>

Example of related achievements (ongoing)

- Multifaceted investigation challenge for new normal initiatives (Moonshot) program
“Harmonious fusion of ecological and socio-economic systems into a mutualistic and resilient eco-socio symbiotic system by 2050 (Eco-Socio Symbiogenesis program)”
- Contribution to the Reports of Comprehensive Assessment of Biodiversity and Ecosystem Services in Japan (JBO: Japan Biodiversity Outlook, 2010,2016) (*JBO3 will be published soon)



(2016)

Mission of J-BON

- Coordination of research projects and facilitation of utilization of existing biodiversity data
- Management, monitoring, networking of various activities throughout the “Monitoring, Assessment, Political decision making, and Enforcement of policy” cycle
- Contribution to policymaking related to biodiversity based on scientific information
- Participation to related organization/networks such as AP-BON and GEO BON